

Global Precipitation Measurement (GPM) mission

Precipitation Processing System

PMM Science Team Meeting

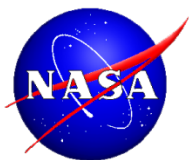
PPS Data Product Status

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NASA/GSFC Code 610.2

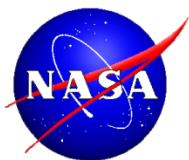
Erich.F.Stocker@nasa.gov



Getting GPM Data Products



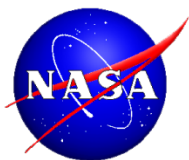
- **For research products you should be registered either with**
 - registration.pps.eosdis.nasa.gov
 - Or the EOSDIS GSFC DAAC
- **For NRT products you should be registered with**
 - registration.pps.eosdis.nasa.gov
 - During registration you should check box that you are interested in NRT
- **Registrations are necessary for IT security and system/product usage reporting**
- **Periodically messages are sent via email registered and if a message bounces the user will be removed from GPM data access**
- **No restrictions on either research or NRT data access**



Background



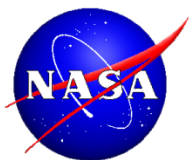
- **PPS production system and NRT system has been in operational state since before launch in February 2014**
- **First public NRT and research L1 GMI swath products available in June 2014**
- **First public NRT and research L2,L3 GMI products available in July 2014**
- **All GPM products except IMERG were available publicly in September of 2014**
- **PPS STORM ordering, subsetting (both parameter and geographical) of research products available since distribution of data**
- **First IMERG NRT late product made available in March 2015**
- **First IMERG NRT early product made available on 1 April 2015**



Current Research Product Version-L1



Type	Version	Date
1AGMI	V03B	2014-12-04
1BGMI	V03C	2014-12-04
1CF16SSMIS	V02C	2015-02-16
1CF17SSMIS	V02C	2015-02-16
1CF18SSMIS	V02C	2015-02-16
1CF19SSMIS	V03A	2014-12-18
1CGCOMW1AMSR2	V03C	2015-03-26
1CGPMGMI	V03C	2014-12-04
1CGPMGMI_R	V03C	2014-12-04
1CMETOPAMHS	V02B	2014-12-02
1CMETOPBMHS	V02B	2014-12-01
1CMT1SAPHIR	V02B	2014-11-28
1CNOAA18MHS	V02B	2014-12-02
1CNOAA19MHS	V02B	2014-12-02
1CNPPATMS	V02B	2014-12-02
1CTRMMTMI	V02B	2014-11-30



Current Research Product Version-L2



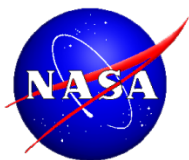
Type	Version	Date
2ADPR	V03B	2014-03-08
2AGPROFGPMGMI	V03D	2014-12-02
2AKa	V03B	2014-03-08
2AKu	V03B	2014-03-08
2BCMB	V03D	2014-12-02
2AGPROFF16SSMIS	V03C	2015-02-16
2AGPROFF17SSMIS	V03C	2015-02-16
2AGPROFF18SSMIS	V03C	2015-02-16
2AGPROFF19SSMIS	V03C	2014-12-18
2AGPROFGCOMW1AMSR2	V03D	2015-03-26
2AGPROFMETOPAMHS	V03C	2014-12-02
2AGPROFMETOPBMHS	V03C	2014-12-01
2AGPROFMT1SAPHIR	V03A	2014-01-31
2AGPROFNOAA18MHS	V03C	2014-12-02
2AGPROFNOAA19MHS	V03C	2014-12-02
2AGPROFTRMMTMI	V03B	2014-11-30



Current Research Product Version-L3



Type	Version	Date
3GPROFGPMGMI	V03D	2014-12-01
3GPROFGPMGMI_DAY	V03D	2014-12-02
3GPROFMETOPAMHS	V03D	2014-12-01
3GPROFMETOPAMHS_DAY	V03D	2014-12-02
3GPROFMETOPBMHS	V03D	2014-12-01
3GPROFMETOPBMHS_DAY	V03D	2014-12-01
3GPROFMT1SAPHIR	V03A	2014-02-01
3GPROFMT1SAPHIR_DAY	V03A	2014-02-01
3GPROFNOAA18MHS	V03D	2014-12-01
3GPROFNOAA18MHS_DAY	V03D	2014-12-02
3GPROFNOAA19MHS	V03D	2014-12-01
3GPROFNOAA19MHS_DAY	V03D	2014-12-02
3GPROFTRMMTMI	V03C	2014-11-01
3GPROFTRMMTMI_DAY	V03C	2014-11-30
3GQDEGGPM_DAY	V01A	2014-03-09



GPM NRT Latency Requirements



- **GMI L1B,L1C,L1CR within 1 hour of data collection**
- **Combined L2 within 3 hours of data collection**

Days to run= 25

Latency Report for Month: 06 2015

Report Date: 2015-06-26T16:06:19

Report Period: 06 1 - 25, 2015

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1: Totals for 1c 201506

Num Expected=7200,Num Made=7198 Latency Met=7197 Latency Average-99.96

2: Totals for gprof 201506

Num Expected=7200,Num Made=7198 Latency Met=7192 Latency Average-99.89

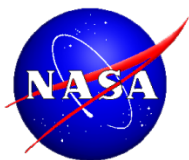
3: Totals for combine 201506

Num Expected=1200,Num Made=1190 Latency Met=1186 Latency Average-98.83

Note: 1c: GMI Brightness Temperature Swath

gprof: GMI Precipitation Retrieval Swath

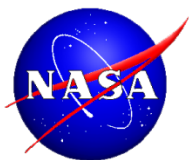
combine: DPR/GMI Combined Precipitation Retrieval Swath



Additional Products Created and Available



- **Many users create their own special products by subsetting L1/L2/L3 research products geographically and/or parameter. Increasing use.**
- **GIS friendly versions of IMERG early and late products: TIFF + world file**
 - Early: 30min, 3-hr and 1-day accumulations
 - Late: 30min, 3-hr, 1-day, 3-day and 7-day accumulations
- **Gridded text (ASCII) hourly grids (.25 deg x .25 deg) packaged by day. Includes retrievals (analogous to TRMM 3G68) from**
 - GMI GPROF
 - Ku L2 Algorithm
 - Ku/Ka L2 match swath dual frequency retrieval
 - Combined GMI/radar retrievals
- **Available effective 8 July 2015 gridded text (ASCII) hourly grids (.25 deg x .25 deg) packaged by day includes GPROF retrievals for GMI and constellation imaging radiometers**
 - GMI
 - AMSR2
 - F16, F17, F18, F19, F20 (currently only missing values)



Current Activities in Support of Reprocessing



- **PPS and X-cal working with Ball and RSS have completed the improved GMI brightness temperature product for V04 reprocessing**
- **Have provided 1 year of initial V04 data to GPROF and combined team for their work and analysis**
- **Currently working with X-cal to finalize the intercalibrated 1C partner products for SSMIS, AMSR2, SAPHIR, MHS**
- **Did an initial version of V04 radar L2 products and made available to combined team. However the Ku/Ka L1B V04 products used for this processing have been withdrawn by JAXA**
- **Preparing to receive revised Ku/Ka L1B products and then produce L2 radar products**
- **As L2 radar products are available PPS will also run the initial V04 combined algorithm that was delivered**
- **Currently also working on TMI related work for the TRMM V8 reprocessing**